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09/689,817	10/13/2000	Masaki Fujiwara	NEC00P260-ki	7075

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EXAMINER

TSANG FOSTER, SUSY N

ART UNIT	PAPER NUMBER
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1745

11

DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/689,817

Applicant(s)

FUJIWARA ET AL.

Examiner

Susy N Tsang-Foster

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 17-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4, 6, 7, 9, 10, 18, 19 and 25 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 8, 17, 20-24 and 26-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to the amendment filed on 1/23/2003. Claims 1-3 and 8-10 have been amended and claims 20-33 have been added. Claims 1-10 and 17-33 are pending. Claims 1, 5, 8, and 17 are finally rejected for the reasons of record. Claims 2-4, 6, 7, 9, 10, 18, 19, and 25 are allowed. Newly added claims 20-24 and 26-33 are finally rejected for reasons necessitated by the amendment.

Claim Objections

2. Claim 1 is objected to because of the following informalities:

In claim 1, "a current collector sheets" should be "a current collector sheet".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, the limitation "said electrode material comprises an uneven surface with a surface area larger than said electrode material" is indefinite as it is unclear how a part of a surface can be greater than a whole surface of the electrode material.

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In claim 27, the limitation “at least one of an aniline, an aniline derivative, a pyrrole, a pyrrole derivative, a thiophene, a thiophene derivative, and polynaphthylene” is indefinite because it is unclear what these derivatives are and there are innumerable possibilities.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 17, 20, 21, 24, 27-29, 32, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshi et al. (US 6,299,653 B1) in view of Larkin (US 6,306,215 B1) and Boer et al. (US 5,656,393).

It is noted that the product-by-process limitations of claim 21 is not given patentable weight since the courts have held that patentability is based on a product itself, even if the prior art product is made by a different process (see In re Thorpe, 227 USPQ 964, (CAFC 1985), In re Brown, 173 USPQ 685 (CCPA 1972), and In re Marosi, 218 USPQ 289, 292-293 (CAFC 1983)).

It is also noted that applicants amended the limitation “the electrode material being a thickness of 300 μ m to 9 mm” in claim 1 to “the electrode material including a thickness of 300 μ m to 9 mm”. The specification does not appear to clearly support the amended limitation. The

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Examiner is interpreting the limitation "the electrode material including a thickness of 300 to 9 mm to be the same as "the electrode material being a thickness of 300 μ m to 9 mm".

Hoshi et al. disclose a lithium battery (col. 21, line 19 to col. 22, line 15) wherein the positive electrode can comprise metal chalcogenides or organic compounds such as polypyrrole, polythiophene, polyaniline, and polyacetylene as the active material. Therein Hoshi et al. also disclose that the positive electrode can be produced by molding the above mentioned materials into predetermined morphologies and that a current collector is used as a substrate for the electrode. Hoshi et al. also disclose adding a conductivity enhancing agent to the positive electrode (col. 25, lines 5-20) and the thickness of the electrode material layer of a positive electrode is 110 microns. Furthermore, the positive electrode and the negative electrode are individually impregnated with electrolytic solution (col. 25, lines 30-33). The electrolytic solution is a nonaqueous solution obtained by dissolving lithium tetrafluoroborate in a mixed solvent of ethylene carbonate and propylene carbonate (col. 24, lines 22-25). The current collector used as a substrate inherently possesses a volume and the thickness of electrode material selected determines the ratio between a volume of the electrode material to a volume of the current collector sheet.

Hoshi et al. also disclose that the current collector used can be a mesh current collector (col. 21, line 15) or an aluminum foil (col. 25, line 15).

Hoshi et al. do not disclose that the molded positive electrode contains a plasticizer in the positive electrode material and that the thickness of the positive electrode material is 300 microns to 9 mm.

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Larkin teaches using dibutyl phthalate as a plasticizer in the electrode compositions to facilitate the formation of the porous structure in the electrode which is extracted after the electrode is formed to form a porous electrode structure (col. 6, lines 28-50).

Boer et al. teach that the particular thickness of the active material layer of an electrode depends on the battery design and its acceptable drain rate and can be customized by the artisan (col. 8, lines 34-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add dibutyl phthalate as a plasticizer to the electrode material of Hoshi et al. in order to enable formation of a porous electrode structure in the electrode that aids in electrolyte permeability in the electrode that results in increased ionic conduction in the electrode.

Inherently, dibutyl phthalate has a boiling point of at least 200 °C and a vapor pressure or no more than 5 mmHg at 85 °C as stated by applicants on page 17, lines 4-8 of the specification.

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to have the thickness of the positive electrode material be 300 microns to 9 mm because the thickness of the electrode active material layer depends on the application requirements of the battery such as the drain rate requirements and the battery design.

7. Claims 8 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshi et al. (US 6,299,653 B1) in view of Larkin (US 6,306,215 B1) and Boer et al. (US 5,656,393) and as evidenced by Poehler et al. (US 5,637,421).

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Hoshi et al. in combination with Larkin and Boer et al. (see paragraph above) disclose all the limitations of claim 8 except explicitly disclosing that the electrode material has an unevenness at the surface of the molded electrode.

However, no electrode material surface is perfectly flat so there will inherently be some degree of unevenness on the surface of the electrode material in the electrode.

As evidenced by Poehler et al., a film of polypyrrole active material inherently has a rough surface (col. 6, lines 28-37).

8. Claims 5 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshi et al. (US 6,299,653 B1) in view of Larkin (US 6,306,215 B1) and Boer et al. (US 5,656,393).

Hoshi et al. disclose a lithium battery (col. 21, line 19 to col. 22, line 15) wherein the positive electrode can comprise metal chalcogenides or organic compounds such as polypyrrole, polythiophene, polyaniline, and polyacetylene as the active material. Therein Hoshi et al. also disclose that the positive electrode can be produced by molding the above mentioned materials into predetermined morphologies and that a current collector is used as a substrate for the electrode. Hoshi et al. also disclose adding a conductivity enhancing agent to the positive electrode (col. 25, lines 5-20) and the thickness of the electrode material layer of a positive electrode is 110 microns.

Hoshi et al. do not disclose that the molded positive electrode contains a plasticizer in the positive electrode material and that the thickness of the positive electrode material is 300

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microns to 9 mm, and that the amount of plasticizer in the positive electrode is 2 to 15% by weight of the total of the electrode material.

Larkin teaches that plasticizer in the electrode compositions facilitates the formation of the porous structure in the electrode which is extracted after the electrode is formed to form a porous electrode structure (col. 6, lines 28-50) and that the amount of plasticizer is from about 1 to 50 by weight ratio to the polymer matrix in the electrode (col. 6, lines 43-50) and amount of polymer matrix (binder) in the electrode is from about 1 to 20% by weight of the electrode (col. 10, lines 30-43). Calculations would indicate that the upper limit of the amount of plasticizer in the electrode by weight would be 0.5 to 10 weight %.

Boer et al. teach that the particular thickness of the active material layer of an electrode depends on the battery design and its acceptable drain rate and can be customized by the artisan (col. 8, lines 34-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add plasticizer to the electrode material of Hoshi et al. in order to enable formation of a porous electrode structure in the electrode that aids in electrolyte permeability in the electrode that results in increased ionic conduction in the electrode.

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to add plasticizer in the amount of 0.5 to 10% by weight of the electrode because this amount is effective to form a porous electrode structure in the electrode that aids in ionic conduction in the electrode as a result of increased permeability of the electrolyte in the electrode. The electrode material having this amount of plasticizer would inherently have a

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porosity of 20-30% by volume since the polymer active materials in Hoshi and the range of plasticizer in electrode material of Larkin are the same as those claimed and disclosed by applicants.

The court has held that claiming of a property or characteristic which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). See also MPEP 2112 and 2112.01. When the Examiner has provided a sound basis for believing that the products of the applicant and the prior art are the same, the burden of proof is shifted to the applicant to prove that the product shown in the prior art does not possess the characteristics of the claimed product. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to have the thickness of the positive electrode material be 300 microns to 9 mm because the thickness of the electrode active material layer depends on the application requirements of the battery such as the drain rate requirements and the battery design.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshi et al. (US 6,299,653 B1) in view of Larkin (US 6,306,215 B1) and Boer et al. (US 5,656,393) as applied to claim 1 above and further in view of Koksang et al. (US 5,424,151).

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Hoshi et al. in combination with Larkin and Boer et al. disclose all the limitations of claim 31 except that the current collector sheet comprises a thickness of no more than about 100 microns.

Koksbang et al. teach that in practice the thickness of a current collector for a positive electrode comprising polymer active material ranges from about 5 microns to about 25 microns in order to minimize the overall thickness of the battery (col. 6, lines 1-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a current collector ranging from about 5 microns to about 25 microns because using a current collector of this thickness minimizes the overall thickness of the battery that is suitable for portable electronic devices.

10. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshi et al. (US 6,299,653 B1) in view of Larkin (US 6,306,215 B1) and Boer et al. (US 5,656,393) as applied to claim 1 above and further in view of Koksbang et al. (US 5,424,151).

Hoshi et al. in combination with Larkin and Boer et al. disclose all the limitations of claim 30 except that the conductivity enhancing agent comprises particles with a diameter of no more than 20 microns.

Hoshi et al. do disclose carbon black as the conductivity enhancing agent in the positive electrode (see col. 25, lines 5-10).

Koksbang et al. teach carbon black having average particle size of about 10 to 100 nm as a conductivity enhancing agent for a polymer active material because carbon black having this

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fine particle size have large surface areas that are suitable for improving conductivity in the polymer active material (col. 10, lines 56-68 and col. 11, lines 1-8) .

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use carbon black having an average particle size of about 10 to 100 nm as a conductivity enhancing agent when a polymer active material is used as the active material for the electrode because carbon black having this fine particle size have large surface areas that are suitable for improving conductivity in the polymer active material.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshi et al. (US 6,299,653 B1) in view of Larkin (US 6,306,215 B1) and Boer et al. (US 5,656,393) as applied to claim 1 above and further in view of Tasaka et al. (US 6,280,854 B1).

Hoshi et al. in combination with Larkin and Boer et al. disclose all the limitations of claim 31 except that the weight ratio of the polymer active material to the conductivity-enhancing agent is in the range of 50:50 to 90:10 in the electrode.

Tasaka et al. teach a polymer electrode comprising polymer active material and conductivity agent where the weight ratio of the polymer active material to the conducting agent is 89:11 (see Example 6 in col. 8, lines 58-65) and the amount of conductivity agent used to determine this weight ratio is effective to improving the conductivity of the amount of polymer active material in the electrode (col. 5, lines 18-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a weight ratio of 89:11 for the weight ratio of the polymer active material to the

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conducting agent because this weight ratio is effective for improving the conductivity of the amount of polymer active material in the electrode.

Response to Arguments

12. Applicant's arguments filed on 1/23/2003 have been fully considered but they are not persuasive.

In response to applicants' central assertion on page 13 of the amendment that the shape and resultant function of the hybrid electrolyte in Hoshi is completely different than the apparatus of Larkin or the flexible polymer bonded electrode of Boer, let alone the present invention, the applicants are arguing a portion of the reference that is not relied upon by the Examiner in the previous office action. The hybrid electrolyte in Hoshi is disclosed as a gelled solid electrolyte that comprises a crosslinked polymer swelled with an electrolytic liquid (electrolytic solution) that is used in the battery (see col. 2, lines 42-49 of Hoshi)

The applicants' claims are drawn to a molded electrode. The Examiner relied on Hoshi for disclosing an electrode in a lithium battery that can be manufactured by the molding process and did not rely on the hybrid electrolyte disclosed in the Hoshi reference. The applicants have appeared to missed the portion in the Hoshi reference relied upon by the Examiner in the previous office action that discloses that the positive and negative electrode of a lithium battery are produced by a molding process (see col. 21, lines 58-62).

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In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The three references of record, Hoshi, Larkin, and Boer are all drawn to a lithium battery. Applicants' argue that the aim of what each reference is attempting to solve is different and therefore the references are not combinable. It is irrelevant what the aim of each reference is attempting to solve. The Examiner relied upon what is disclosed in Hoshi and what is taught in Larkin, Boer and Poehler.

Applicants have also argued what Larkin does not teach. Applicants argued on page 14 of the amendment that Larkin does not disclose that the electrode material and the current collector sheet are molded into one piece. In response, the Larkin reference was relied upon for teaching the use of a plasticizer to form a porous electrode structure. The Examiner relied on Hoshi for the disclosure that the electrodes are manufactured by a molding process as discussed above. The applicants also contend on page 15 of the amendment that Larkin does not disclose any thickness. Again, Larkin was not relied upon for thickness but Boer was relied upon for the teaching of the electrode thickness. Applicants also apply a similar argument to what Boer does not teach on page 16 of the amendment instead of acknowledging what Boer does teach.

On page 13 of the amendment, applicants state that even if combined, the references do not teach or suggest the features of independent claim 1, including an electrode material comprising a polymer active material, a conductivity enhancing agent and a plasticizer. The Examiner has provided a detailed explanation in the previous office action and in the present

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office action of how the references have been combined with proper motivation to teach all the limitations of the presently claimed invention.

On page 14 of the amendment, applicants traverse page 5, section 1 of the previous office action because allowed claim 18 claims that the electrode material can be either positive or negative and accordingly, Hoshi does not teach or suggest the features of claim 1. In response, allowed claim 18 does not depend on claim 1, but on allowable claim 2. Even if applicants meant to argue claim 17 which depends from claim 1, claim 17 states that the electrode can be positive or negative and Hoshi discloses that polypyrrole, polythiophene, polyaniline, and polyacetylene can be used in the positive electrode (col. 21, lines 19-38). Furthermore, these polymer active materials are identical to those disclosed by applicants. Claim 17 does not recite that the electrode is a negative electrode. Furthermore, the polarity of the electrode in a battery depends on whether the battery is in charge or discharge mode.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner has provided motivation that it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the plasticizer of Larkin to the electrode material of Hoshi et al. because the plasticizer is routinely used in battery electrodes to enable formation of a porous electrode structure that aids in electrolyte permeability in the electrode to result in an increased ionic conduction in the electrode.

The Examiner also provided proper motivation that it would have also been obvious to one of ordinary skill in the art at the time the invention was made to have the thickness of the positive electrode material be 300 microns to 9 mm because the thickness of the electrode active material layer depends on the application requirements of the battery such as the drain rate requirements and the battery design. The battery design includes capacity requirements of the battery that would require a thicker electrode for large scale applications of the battery.

In response to applicants argument that Poehler does not have the same aim as Hoshi, Larkin, or Boer and that Poehler is non-analogous art and therefore not combinable with Hoshi, Larkin, or Boer absent hindsight, Poehler was used an evidentiary reference, not as a secondary reference to show that the surface of a polymer active material is inherently rough. Even without

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relying on the Poehler reference as an evidentiary reference, the Examiner stated in the previous office action (see paragraph 11) that no electrode material surface is perfectly flat so there will inherently be some degree of unevenness on the surface of the electrode material in the electrode. Furthermore, applicants did not define in the claims the degree of unevenness at the surface of the electrode material.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. the current collector may have a roughened surface for higher adhesivity with the electrode material according to claim 8 as stated on page 19 of applicants' amendment) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Allowable Subject Matter

13. Claims 2-4, 6, 7, 9, 10, 18, 19, and 25 are allowed.
14. The following is a statement of reasons for the indication of allowable subject matter:

The present invention claims a molded electrode comprising: a) an electrode material that comprises a polymer active material, a conductivity enhancing agent, and a plasticizer; b) a plurality of current collector sheets; the electrode material and the current collector sheets are

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formed into one piece and the current collector sheets are spaced from each other in the thickness direction of the electrode (applies to claims 2, 6, 9, and 18).

The present invention also claims a molded electrode comprising: a) an electrode material that comprises a polymer active material, a conductivity enhancing agent, and a plasticizer; b) at least one current collector sheet; the electrode material and the current collector sheet are formed into one piece and the ratio of the volume of the electrode material and the volume of the current collector sheet is 30:1 to 100:1 provided the volume of the terminal portion of the current collector sheet is excluded from the volume of the current collector sheet (applies to claims 3, 4, 7, 10, and 19).

The closest prior art of record, Hoshi et al. (US 6,299,653 B1) discloses a molded electrode comprising a polymer active material and a current collector but does not disclose, teach or suggest any of the following features: 1) that the molded electrode comprises a plurality of current collector sheets; the electrode material and the current collector sheets are formed into one piece and the current collector sheets are spaced from each other in the thickness direction of the electrode or 2) that the ratio of the volume of the electrode material and the volume of the current collector sheet in the molded electrode is 30:1 to 100:1 provided the volume of the terminal portion of the current collector sheet is excluded from the volume of the current collector sheet.

Conclusion

15. Any inquiry concerning this communication or earlier communications should be directed to examiner Susy Tsang-Foster, Ph.D. whose telephone number is (703) 305-0588. The examiner can normally be reached on Monday through Thursday from 9:30 AM to 8:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at (703) 308-2383. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900.

The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9310 for regular communications and (703) 872-9311 for After-Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

st/7 April 2003

Gregory Isang Foster